Warning

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

Đại lý phân phối

DỊCH VỤ SAU BÁN HÀNG
18006777
Miễn phí cước cuộc gọi

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www.daikin.com.vn

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PCRVN1513

Split Type Air Conditioner
FTXM-H Series

DC Inverter Control
Heat Pump [50 Hz] **R-32**

Put a Smile on Your Face

Smile Curve

The FTXM-H series features Daikin's new smile curve design for the front panel. The glossy finish creates a sleek, modern look which blends easily with any decor. The unique round shape adds a little brightness to every day. And if that's not enough, the outstanding energy savings will definitely have you smiling.

NEW For the 2.0 kW class model

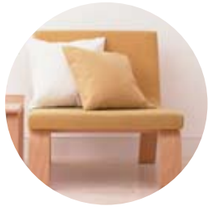
NEW

R-32

FTXM20/25/35H

Features

- Next-generation R-32 refrigerant
- Top three energy ratings
- New smile curve design
- Warm on winter days



Note: NEW indicates a model with a new capacity. NEW indicates a model with a new design.

All Models Feature High Energy Ratings

2.0, 2.5 and 3.5 kW Class

FTXM20/25/35HVMV

RXM20/25/35HVMV

R-32 DC Inverter

2.0 kW Class	FTXM20HVMV / RXM20HVMV NEW		
Cooling capacity	Rated (Min.-Max.)	kW	2.0 (1.0-2.6)
		Btu/h	6,800 (3,400-8,850)
Heating capacity	Rated (Min.-Max.)	kW	2.0 (1.0-2.6)
		Btu/h	6,800 (3,400-8,850)

2.5 kW Class	FTXM25HVMV / RXM25HVMV		
Cooling capacity	Rated (Min.-Max.)	kW	2.5 (1.0-3.4)
		Btu/h	8,500 (3,400-11,600)
Heating capacity	Rated (Min.-Max.)	kW	2.5 (1.0-3.4)
		Btu/h	8,500 (3,400-11,600)

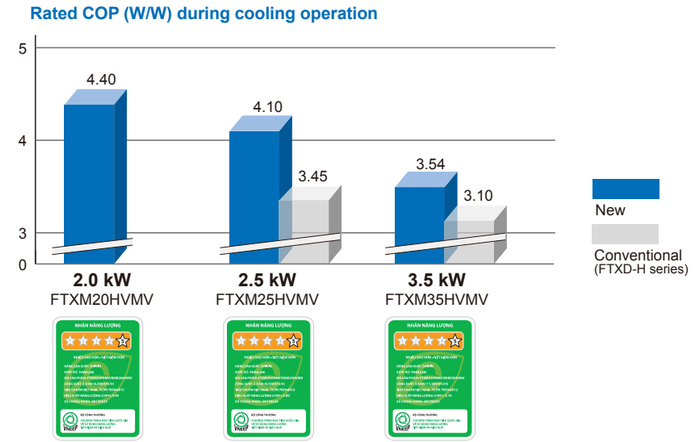
3.5 kW Class	FTXM35HVMV / RXM35HVMV		
Cooling capacity	Rated (Min.-Max.)	kW	3.5 (1.2-3.8)
		Btu/h	11,900 (4,100-12,950)
Heating capacity	Rated (Min.-Max.)	kW	3.5 (1.2-3.8)
		Btu/h	11,900 (4,100-12,950)

Note:
Operation range
Cooling: °CDB: 10 to 46
Heating: °CWB: 2 to 20

Note: NEW indicates a model with a new capacity. NEW indicates a model with a new design.

COPs of 3.54 to 4.40

The FTXM-H series achieves COPs of 3.54 to 4.40 during cooling operation (CSPF from 4.9 to 5.1) thanks to Daikin's DC Inverter control and next-generation R-32 refrigerant.



What Is COP?
An air conditioner's COP (coefficient of performance) indicates how efficiently the unit uses energy. A higher COP means greater energy efficiency. It also means lower electricity consumption, so you save money.

$$COP = \frac{\text{Capacity (W)}}{\text{Power consumption (W)}}$$

Daikin DC Inverter Technologies

DC Inverter Control

DC Inverter is Daikin's term for an inverter air conditioner equipped with a DC motor. These motors use magnets to generate rotation, making them more efficient than AC motors. Daikin has fitted its advanced DC motors for compressors and fan motors with powerful neodymium magnets to achieve even greater efficiency. It calls these devices Reluctance DC motors.

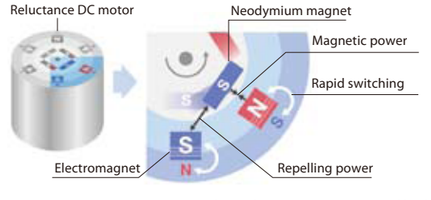
Swing compressor

Swing Compressor

With its smooth rotation, the swing compressor significantly decreases friction and vibration. It also eliminates the leakage of refrigerant gas during compression. These advantages provide quiet and efficient operation.

Reluctance DC Motor for Compressors

The compressor is one of an air conditioner's core components and its performance is directly linked to the motor. Daikin was the first to successfully use a Reluctance DC motor with a scroll compressor in commercial-use air conditioners[1]. It has now adapted this high-efficiency motor for the swing compressors in its residential-use systems. The Reluctance DC motor saves energy by generating more power with a smaller electric current than AC or conventional DC motors.



Embedding high-strength neodymium magnets in the shaft turns the entire centre of the motor into a powerful magnet. By rapidly switching the poles of this electromagnet, the Reluctance DC motor is able to produce even greater speed and power.

Note: 1. Daikin's achievement was recognised by the Institute of Electrical Engineers of Japan at the 54th Academic Promotion and Technical Development Awards in 1998.

Next-Generation R-32 Refrigerant

As the sole worldwide manufacturer of both air conditioning equipment and refrigerants, Daikin is continuously researching refrigerants as well as new technologies that can reduce energy consumption. Use of refrigerants with a lower impact on global warming is urgently required as climate change has become one of the most critical global issues. Daikin has now adopted R-32. This next-generation refrigerant does not deplete the ozone layer and has a lower impact on global warming.

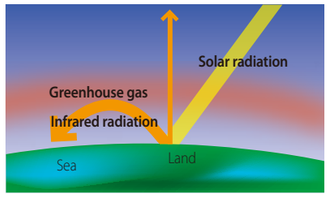
Zero Ozone Layer Depletion

The ozone layer surrounds the Earth and helps to absorb the harmful ultraviolet rays in sunlight. Although R-22 (HCFC) refrigerant had been used in air conditioners and refrigerators, it damages the ozone layer and its use is to be mostly eliminated by 2020. To replace R-22, Taiwan, Japan and European countries with more progressive regulations selected R-410A (HFC).

Refrigerant	R-22	R-410A	R-32
Ozone depletion potential	0.05	0	0
Global warming potential[1]	1,810	2,090	675

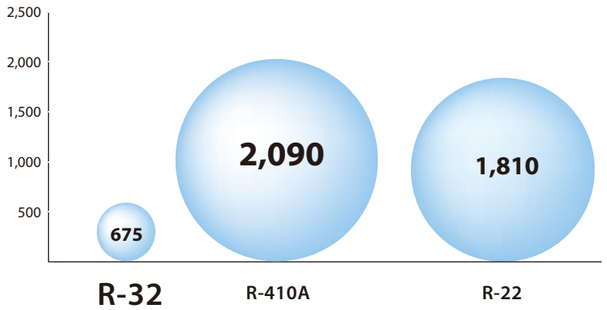
Less Impact on Global Warming

The Earth retains solar heat in the daytime for warming and then releases this heat at night, allowing it to maintain an optimal temperature range. However, with greenhouse gases increasing, it is more difficult to discharge heat and the planet is gradually becoming warmer. This is called global warming. R-32 has only around 30% of the global warming potential of R-410A and R-22.

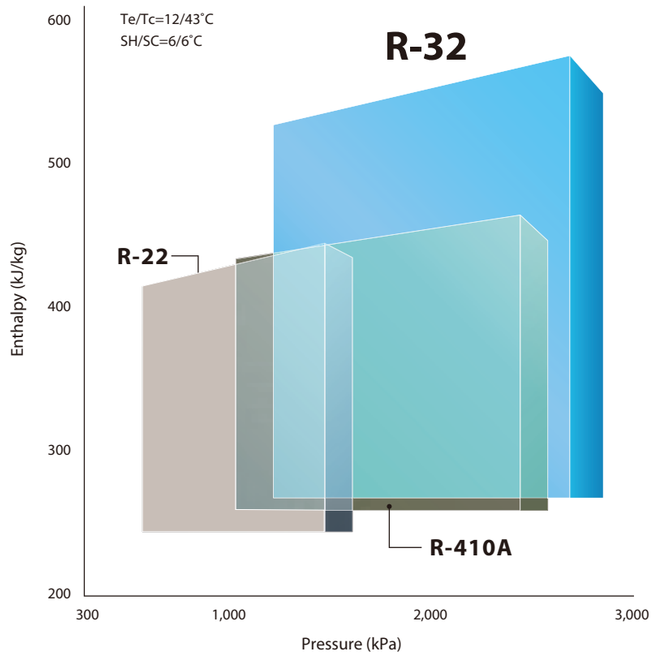


Greenhouse gases cause damage which allows solar radiation to pass through the Earth's outer atmosphere while also trapping infrared radiation. These gases rapidly increase and interfere with the Earth's ability to release heat into space, causing the ambient temperature to rise.

Global Warming Potential[1]



Refrigeration Cycle of R-32



Increased Energy Efficiency

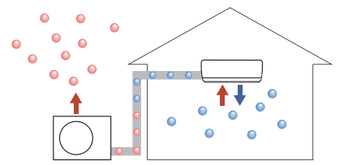
The potential refrigerating effect of R-32 is 1.5 times that of R-410A. Thus the piping diameter can be smaller. As a result, the charging volume can be approximately 30% less than with R-410A.

Refrigerants: Heat Release in Air Conditioning Systems

Similar Mechanism to Human Body
An air conditioner functions in a surprisingly similar way to the human body. In the body, blood carries heat as it circulates and helps to release excess heat through sweating. Refrigerant also carries heat and helps to adjust temperature through heat exchange.

Effective Release of Heat
Refrigerant is changed from gas to liquid in the outdoor heat exchanger, after which it is evaporated in the indoor heat exchanger. During cooling operation, cool air is discharged from the indoor unit while heat is removed from the air taken in from inside the room. This heat is delivered to the outdoor unit and released.

Refrigerant Flow during Cooling



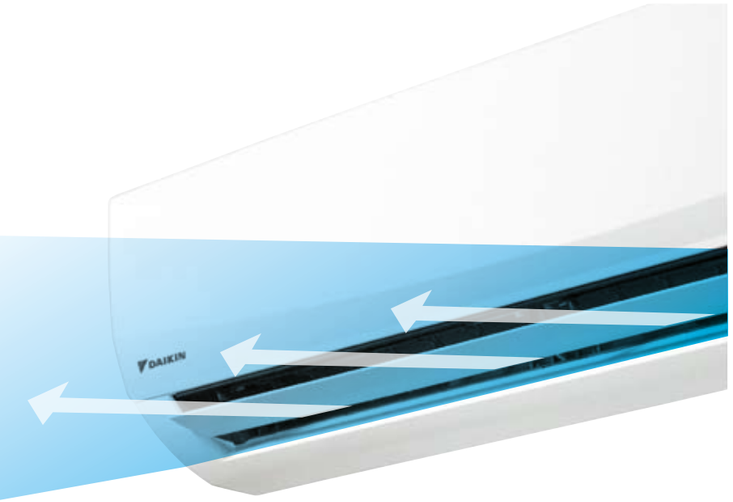
Note: 1. Global warming potential values are based on the Fourth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC).

Comfortable Airflow

Power-Airflow Flap

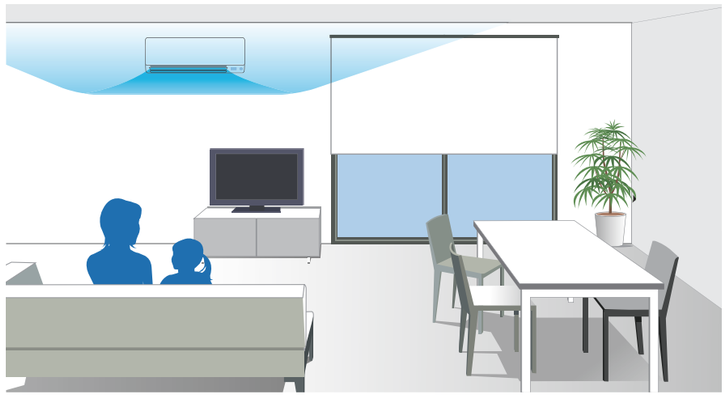
The Power-Airflow Flap flattens out during cooling operation to deliver air to every part of a room. The flap can direct warm air straight down to the floor during heating operation. Selecting the low angle sends air right to the corners, while choosing the high angle spreads air around the centre.

When you choose the low angle, cool air slides off to reach the corners of the room.

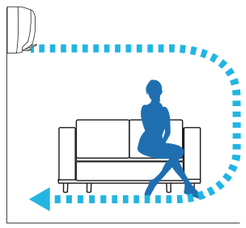


Comfort Airflow Mode

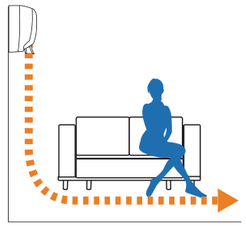
Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to a person's body. This setting redirects air by moving the flap upward during cooling operation and downward during heating operation.



Cooling



Heating



Inverter Powerful Operation

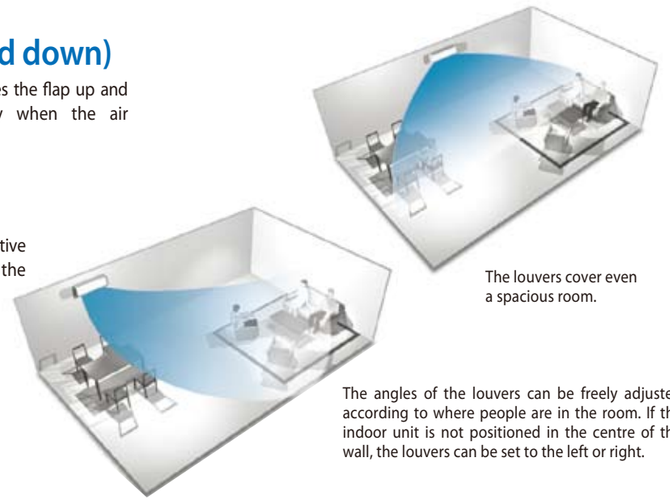
Inverter Powerful Operation boosts airflow to maximum volume for a 20 minute period. This function is convenient for quickly adjusting the indoor temperature to the set temperature. After 20 minutes, the unit automatically returns to its previous settings.

Vertical Auto-Swing (up and down)

Vertical Auto-Swing automatically moves the flap up and down. The flap shuts automatically when the air conditioner is turned off.

Wide-Angle Louvers

The Wide-Angle Louvers provide effective airflow coverage no matter where the indoor unit is placed in a room. The louvers deliver cool air right to the corners of any space.

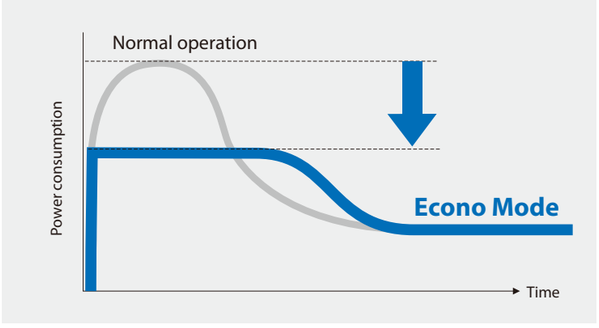


The louvers cover even a spacious room.

The angles of the louvers can be freely adjusted according to where people are in the room. If the indoor unit is not positioned in the centre of the wall, the louvers can be set to the left or right.

Econo Mode

This function limits the maximum power consumption. It helps to reduce power usage if the cooling load is high, for example, at startup or during large gatherings and periods of direct sunshine.



Maximum capacity decreases during Econo Mode, requiring more time to reach the set temperature.

Advanced Quietness, Convenience and Cleanliness

Indoor Unit Quiet Operation

The 2.0 and 2.5 kW class models provide a low sound level of just 25 dB (A) when Quiet (SL) is selected.

All models also give you a choice of 5-step, Quiet or Automatic settings for the fan speed. The Quiet setting selects Indoor Unit Quiet Operation, which decreases the sound pressure level by 3 to 4 dB (A) below the Low setting.

This wide range of settings allows you to precisely control the fan speed according to your needs. For example, the Quiet function will help you to sleep comfortably at night.

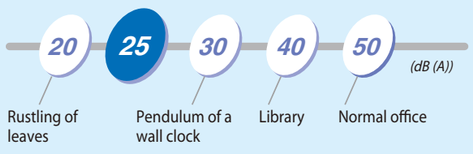
The 2.5 kW class model during cooling operation

Fan speeds	Sound pressure levels
High (H)	**40 dB (A)**
Low (L)	**29 dB (A)**
Quiet (SL)	**25 dB (A)**

4 dB (A)

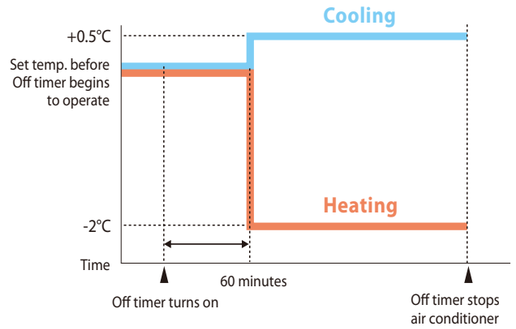
	Auto	SL	L	M	H
Fan speed		Low ←			→ High
Sound pressure level		Each decrease in airflow volume reduces the sound pressure level.			

25 dB (A) is so quiet you can even hear whispers[1]



Night Set Mode

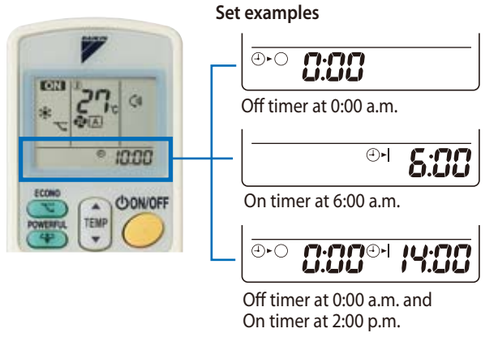
Pressing the Off Timer button automatically selects Night Set Mode. This function prevents excessive cooling or heating for a pleasant sleep. After 60 minutes, the room temperature is raised by 0.5°C for cooling operation or lowered by 2°C for heating operation.



24 Hour On/Off Timer

This timer can start or stop the air conditioner within a 24 hour period. It can be preset in 10 minute steps by pressing the On/Off Timer button on the wireless remote controller. The On Timer and Off Timer can be used in combination.

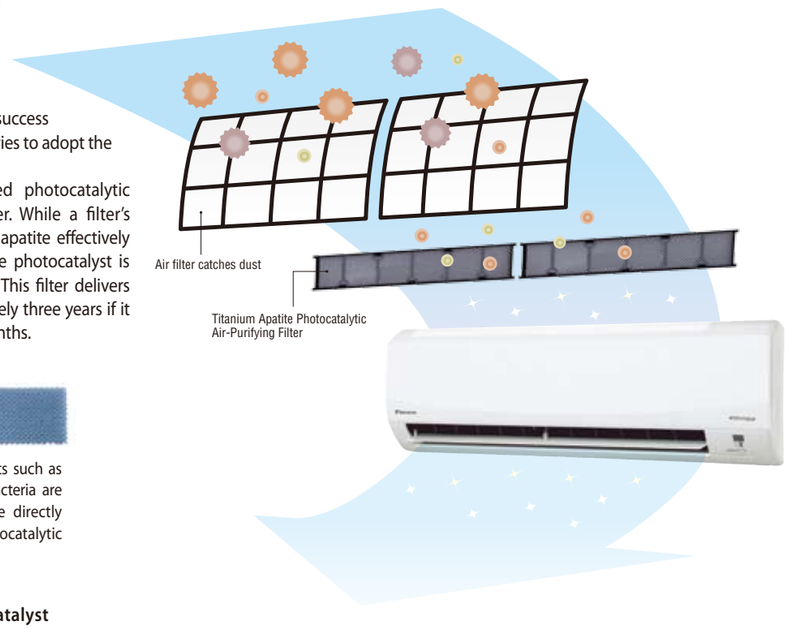
Set examples



Titanium Apatite Photocatalytic Air-Purifying Filter

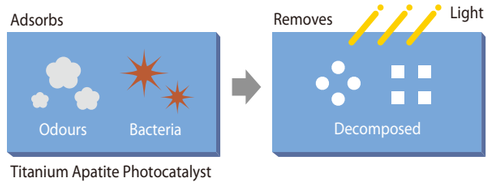
Photocatalytic air purifying is a deodorising and anti-bacterial technology. Daikin was the first to apply this advance to the air-purifying filters used in air conditioners[2]. Daikin's success has led manufacturers in various industries to adopt the technology for antibacterial products.

Titanium apatite is an advanced photocatalytic material with great adsorption power. While a filter's micron-level fibres trap dust, titanium apatite effectively adsorbs and decomposes bacteria. The photocatalyst is activated simply by exposure to light. This filter delivers consistent performance for approximately three years if it is washed with water once every six months.



This filter is not a medical device. Benefits such as the adsorption and decomposition of bacteria are only effective for substances which are directly attached to the Titanium Apatite Photocatalytic Air-Purifying Filter.

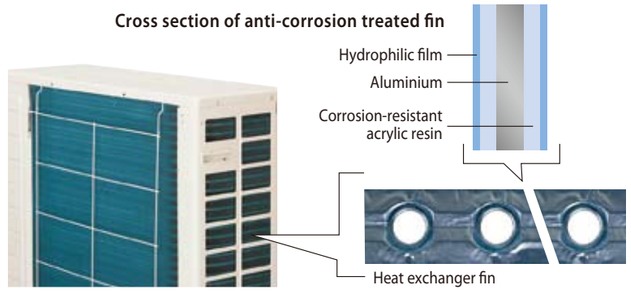
Effect of Titanium Apatite Photocatalyst



Anti-Corrosion Treatment of Outdoor Heat Exchanger Fins

The outdoor unit's heat exchanger fins are processed using a special anti-corrosion treatment. The surface is covered with a thin acrylic resin layer to provide enhanced resistance to acid rain and salt corrosion.

Cross section of anti-corrosion treated fin



Notes: 1. Based on "Examples of Sound Pressure Levels", Ministry of the Environment, Japan, November 2002.
2. This practical application of titanium apatite was a world first. Announced in September 2003 at the 3rd International Workshop on the Utilization and Commercialization of Photocatalytic Systems, Coatings for Clean Surfaces, Water and Air Purification.

Functions

Comfortable Airflow

Power-Airflow Flap
The Power-Airflow Flap flattens out during cooling operation to deliver cool air to the corners of a room. The flap also directs warm air straight down to the floor during heating operation.
▶ See page 7

Wide-Angle Louvers
The Wide-Angle Louvers provide wide airflow coverage for effective operation no matter where the indoor unit is placed in a room.
▶ See page 8

Vertical Auto-Swing (up and down)
This function automatically moves the flaps up and down to distribute air across a room.
▶ See page 8

Comfort Airflow Mode
This function prevents uncomfortable drafts from blowing directly on to the body. To prevent drafts, the flap moves upward during cooling operation and downward during heating operation.
▶ See page 7

Comfort Control

Indoor Unit Quiet Operation
Indoor unit operating sound pressure levels are decreased from the Low setting fan speed using the wireless remote controller.
▶ See page 9

Automatic Operation
This function automatically selects cooling or heating operation mode based on the room temperature at startup.

Programme Dry Function
The microprocessor works to eliminate humidity while maintaining the most consistent temperature possible. It automatically controls the temperature and fan speed.

Auto Fan Speed
The microprocessor automatically controls fan speed to adjust the room temperature to the set temperature.

Cleanliness

Titanium Apatite Photocatalytic Air-Purifying Filter
This filter contains the advanced photocatalytic material titanium apatite. While the filter's micron-level fibres trap dust, this photocatalyst adsorbs and decomposes bacteria. The filter can be used for up to three years with proper maintenance.
▶ See page 10

Wipe-Clean Flat Panel
The flat panel design can be cleaned with only the single pass of a cloth across its smooth surface. The flat panel can also be easily removed for more thorough cleaning.

Lifestyle Convenience

Econo Mode
This mode limits the maximum power consumption. It improves operating efficiency and also prevents circuit breakers from being overloaded.
▶ See page 8

Inverter Powerful Operation
This function is convenient for boosting cooling or heating performance for a 20 minute period both when you first turn on your air conditioner or want to quickly change the room temperature.
▶ See page 8

Indoor Unit On/Off Switch
The unit can be conveniently started by hand if the wireless remote controller is misplaced or its batteries are not charged.

Timers

24 Hour On/Off Timer
This timer can start or stop the air conditioner within a 24 hour period. It can be preset in 10 minute steps by pressing the On/Off timer button on the wireless remote controller. The On timer and Off timer can be used in combination.
▶ See page 9

Night Set Mode
Pressing the Off timer button automatically selects Night Set Mode. This function prevents excessive cooling or heating for a pleasant sleep. After 60 minutes, the room temperature is raised by 0.5˚C for cooling operation or lowered by 2˚C for heating operation.
▶ See page 9

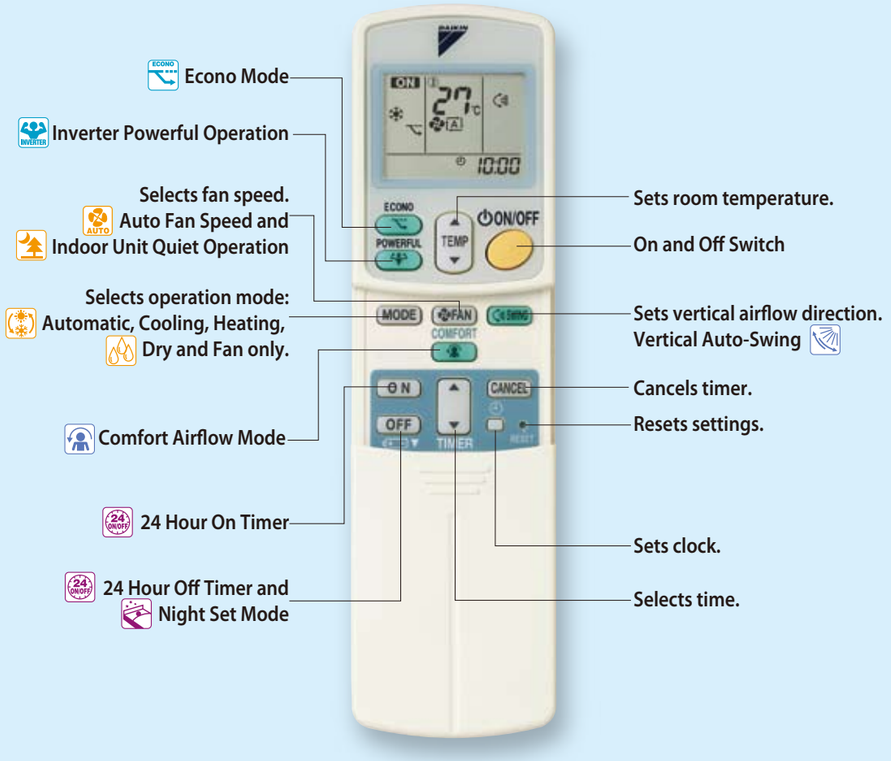
Worry Free

Auto-Restart after Power Failure
The air conditioner memorises the settings for operation mode (automatic, cooling, heating, dry and fan only), airflow, temperature, etc., and automatically returns to them when power is restored after a power failure.

Self-Diagnosis with Digital Display
Malfunction codes are shown on the digital display panel of the wireless remote controller for fast and easy maintenance.

Anti-Corrosion Treatment of Outdoor Heat Exchanger Fins
The outdoor unit's heat exchanger fins are processed using a special anti-corrosion treatment. The surface is covered with a thin acrylic resin layer to enhance the fins' resistance to acid rain and salt corrosion.
▶ See page 10

Wireless remote controller



Specifications and Options

Specifications

Model name	Indoor unit			FTXM20HVMV	FTXM25HVMV	FTXM35HVMV
	Outdoor unit			RXM20HVMV	RXM25HVMV	RXM35HVMV
Capacity	Cooling	Rated (Min.-Max.)	kW	2.0 (1.0-2.6)	2.5 (1.0-3.4)	3.5 (1.2-3.8)
			Btu/h	6,800 (3,400-8,850)	8,500 (3,400-11,600)	11,900 (4,100-12,950)
	Heating	Rated (Min.-Max.)	kW	2.0 (1.0-2.6)	2.5 (1.0-3.4)	3.5 (1.2-3.8)
			Btu/h	6,800 (3,400-8,850)	8,500 (3,400-11,600)	11,900 (4,100-12,950)
Power supply				1 phase, 220-240 V, 50 Hz / 1 phase, 220-230 V, 60 Hz		
Running current	Cooling	Rated	A	2.8	3.0	4.6
	Heating			2.8	3.0	4.6
Power consumption	Cooling	Rated (Min.-Max.)	W	454 (225-645)	610 (225-1,070)	990 (250-1,320)
	Heating			454 (225-645)	610 (225-1,070)	990 (250-1,320)
COP	Cooling	Rated	W/W	4.40	4.10	3.54
	Heating			4.40	4.10	3.54
CSPF			W/W	4.9	5.8	5.1
Indoor unit				**FTXM20HVMV**	**FTXM25HVMV**	**FTXM35HVMV**
Front panel colour				Shiny pure white		
Airflow rate	Cooling	H	m^3/min (cfm)	9.0 (318)	9.0 (318)	9.7 (342)
	Heating			9.0 (318)	9.0 (318)	9.9 (349)
Fan speed				5 steps, quiet and automatic		
Sound pressure level	Cooling	H/L/SL	dB (A)	39/28/25	40/29/25	41/30/26
	Heating			39/29/27	40/30/27	41/31/28
Dimensions	H x W x D		mm	283 x 770 x 203		
Machine weight			kg	8		
Outdoor unit				**RXM20HVMV**	**RXM25HVMV**	**RXM35HVMV**
Casing colour				Ivory white		
Compressor	Type			Hermetically sealed swing type		
	Motor output		W	395	551	913
Refrigerant	Type			R-32		
	Charge volume		kg	0.75		
Sound pressure level	Cooling	H	dB (A)	48		
	Heating			48		
Dimensions	H x W x D		mm	550 x 658 x 275		
Machine weight			kg	27		
Operation range	Cooling		˚CDB	10 to 46		
	Heating		˚CWB	2 to 20		
Piping connection	Liquid		mm	ø6.4		
	Gas			ø9.5		
	Drain			ø16.0		
Max. piping length			m	15		
Max. level difference				12		

The above values are based on operation with a 220 V, 50 Hz power supply.

Measurement conditions
1. Cooling capacity is based on: indoor temp. 27˚CDB, 19˚CWB; outdoor temp. 35˚CDB; piping length 7.5 m.
2. Heating capacity is based on: indoor temp. 20˚CDB; outdoor temp. 7˚CDB, 6˚CWB; piping length 7.5 m.
3. Sound pressure levels are measured in an anechoic chamber based on temperature condition 1 and 2 above. These values are normally somewhat higher during actual operation as a result of ambient conditions.

Options

Indoor Unit

No.	Item	FTXM20/25/35H
1	Titanium apatite photocatalytic air-purifying filter *1	KAF970A46
2	Remote controller loss prevention with chain	KKF917A4

Note: *1. The filter is a standard accessory.

Titanium apatite photocatalytic air-purifying filter
KAF970A46

Remote controller loss prevention with chain
KKF917A4

Outdoor Unit

No.	Item	RXM20/25/35H
1	Air direction adjustment grille	KPW937B4
2	Drain plug *1	KKP937A4

Note: *1. One set includes five pieces for five units.

Drain plug
KKP937A4